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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,816	04/27/2001	Ahti Muhonen	P279256	2170
909	7590	05/24/2004	EXAMINER	
PILLSBURY WINTHROP, LLP			DAO, MINH D	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			2682	7

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/830,816

Applicant(s)

MUHONEN ET AL.

Examiner

MINH D DAO

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-16 is/are rejected.
- 7) ☒ Claim(s) 4,5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1,2,3, 6,7,8,14,15,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver et al. (US Patent 6,560,457) in view of Fried et al. (US 6,094,581).

Regarding claim 1, Silver teaches a method for providing location service information (See Figs. 5 and 6, Location Service Node 200) related to a mobile station in a mobile communications system supporting connections of a first type and a second type (Col.

5, lines 21-31), the method comprising: receiving a request from a requesting entity (Col. 9, lines 13-17); retrieving the location service information related to the mobile station (Col. 9, lines 17-25); and providing a response to the request (Col. 9, lines 26-30); and performing, in the retrieving step, at least a first attempt via the preferred type of connection (Col. 5, lines 21-31; Circuit-Switched Network 110). However, Silver fails to teach the determining a preferred type of connection based on the first set of predetermined criteria. Fried, in an analogous art, teaches determining a preferred type of connection based on the first set of predetermined criteria (col. 7, lines 11-20). In this case, the forcing of the mobile unit 101 into micro cell layer reads on the determining preferred type of connection, and the being engaged in a circuit switched of the mobile reads on the predetermined criteria of the present invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the teaching of Fried to Silver in order for the mobile to be able to compatibly handoff to the next cell that uses the same protocol.

Regarding claim 2, the combination of the teachings of Silver and Fried teaches the method of claim 1 wherein the first set of predetermined criteria is determined by checking whether the mobile station currently has an active connection via at least one type of connection (reference Fried, col. 7, lines 11-20).

Regarding claim 3, the combination of the teachings of Silver and Fried teaches the method of claim 2 wherein the checking is based on examining the request (reference Fried, col. 7, lines 11-20).

Regarding claim 6, the combination of the teachings of Silver and Fried teaches the method of claim 1, wherein the first type of connection is circuit-switched and the second type of connection is packet-switched (reference Silver, Col. 5, lines 21-31).

Regarding claim 7, the combination of the teachings of Silver and Fried teaches the method of claim 6, wherein if the mobile station is having an ongoing call, the preferred type of connection is circuit-switched, otherwise it is packet-switched (reference Fried, col. 7, lines 21-46).

Regarding claim 8, the combination of the teachings of Silver and Fried teaches the method of claim 6, further comprising establishing circuit-switched communications for the mobile station if the packet-switched communications are not established (reference Fried, col. 7, lines 21-46).

Regarding claim 14, the combination of the teachings of Silver and Fried teaches the method of claim 1 wherein the request is received by a Gateway Mobile Location Centre (reference Silver, see Fig. 1, MSC-GW), and the method further comprises retrieving (reference Silver, Col. 9, lines 17-25), by the Gateway Mobile Location Centre the

location service information via a Mobile Services Switching Centre (reference Silver , see Fig. 1, MSC-S), which in turn retrieves the location service information via a Serving Mobile Location Centre (reference Silver , see Fig. 1, MSC-O), directly, if a circuit-switched connection has been established for the mobile station, and, otherwise, indirectly, via a Serving GPRS Support Node (reference Silver, see Fig. 1, SGGN); (reference Silver, Col. 4, lines 24-55).

Regarding claim 15, the combination of the teachings of Silver and Fried does not directly teach the limitations of claim 15. However, it would be obvious that, referring to Fig. 1, the method of claim 14 further comprising sending from the Gateway Mobile Location Centre to the Mobile Services Switching Centre the address of the Serving GPRS Support Node in order for all portions of the system to communicate with each other.

Regarding claim 16, the claim has the limitations as that of claim 1, and therefore is interpreted and rejected for the same reason set forth in claim 1.

1. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver et al. (US Patent 6,560,457) in view of Fried et al. (US 6,094,581) and further in view of Billstrom et al. (US Patent 5,590,133).

Regarding claim 9, the combination of the teachings of Silver and Fried teaches that the first type of connection is circuit-switched and the second type of connection is packet-switched (reference Silver, col. 5, lines 21-31). However, the combination of the teachings of Silver and Fried fails to teach that the method of claim 6 further comprises establishing at least one implicit Packet Data Protocol context. Billstrom, in an analogous art, teaches an establishing of at least one implicit Packet Data Protocol context (Col. 18, lines 28-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the teaching of Billstrom to Silver and Fried in order to have a communication system that would be able to provide integrated system concept that provides the new packet data services using TDMA cellular infrastructures to the extent with packet data functional performance requirements as taught by Billstrom (Col. 3, lines 62-67).

Regarding claim 10, the combination of the teachings of Silver, Fried and Billstrom teaches the method of claim 9 wherein establishing the Packet Data Protocol context includes allocating a predefined Network layer Service Access Point Identifier value (Reference Billstrom, Col. 18, lines 12-19).

Regarding claim 11, the combination of the teachings of Silver, Fried and Billstrom teaches the method of claim 9 further comprises establishing at least one implicit Packet Data Protocol context between the mobile station and a support node (Reference Billstrom, Col. 18, lines 8-11).

Regarding claim 12, the combination of the teachings of Silver, Fried and Billstrom teaches the method of claim 9 further comprises establishing at least one implicit Packet Data Protocol context between the support node and a Serving Mobile Location Centre currently serving the mobile station (Reference Billstrom, Col. 18, lines 28-32; Also see Fig.16).

Regarding claim 13, the combination of the teachings of Silver, Fried and Billstrom teaches the method of claim 9 further comprises establishing at least one explicit Packet Data Protocol context between the support node and a Serving Mobile Location Centre currently serving the mobile station (Reference Billstrom, Col. 18, lines 28-32; Also see Fig.16).

Allowable Subject Matter

2. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the combination of the teachings of Silver and Fried teaches the limitations in claim 1. However, Silver fails to teach that if the first attempt results in a failure, a second set of predetermined criteria is determined based on a reason for the failure as specified in the claim.

Response to Arguments

3. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH D DAO whose telephone number is 703-305-5589. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVIAN C CHIN can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Minh Dao
Examiner
Art Unit 2682
May 12, 2004 *MD*


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600